
		NTSB ID: DEN02FA106		Aircraft Registration Number: N5119R	
		Occurrence Date: 09/14/2002		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Delta	State CO	Zip Code 81416	Local Time 0955	Time Zone MDT	
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 1		Direction From Airport: 30	
Aircraft Information Summary					
Aircraft Manufacturer Beech		Model/Series B19		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>HISTORY OF FLIGHT</p> <p>On September 14, 2002, at 0955 mountain daylight time, a Beech B19, N5119R, owned and operated by Sid Hall Enterprises, Inc., d/b/a Southern Aircraft Sales of Albany, Georgia, was destroyed when it impacted terrain and burned 2 miles north of Delta, Colorado. The private pilot, the sole occupant aboard, was fatally injured. Day visual meteorological conditions prevailed, and no flight plan had been filed for the ferry flight being operated under Title 14 CFR Part 91. The flight originated at Delta at 0953, and was en route to Albany with unknown intermediate stops.</p> <p>The airplane had recently undergone a pre-purchase annual inspection and, according to Sid Hall Enterprises, they had purchased the airplane from a private individual in Delta. The pilot, whom they had used on previous occasions, intended to ferry it to Albany to accumulate flight time. According to the airport manager, the previous owner flew the airplane the day before the accident. After the uneventful flight, the airplane was serviced with 31.1 gallons of 100-octane low lead aviation grade gasoline. This filled it to its 60-gallon capacity. The next morning, the pilot --- carrying a flight bag and an overnight kit --- arrived at the airport and boarded the airplane. There is no record of the pilot obtaining a weather briefing or filing a flight plan. Witnesses said the pilot "seemed to be in a hurry" and made a "quick" preflight inspection. After starting the engine, the pilot taxied to the end of runway 03 and performed the pretakeoff checks. The airport manager said the magneto checks sounded normal, but the checks were brief --- "He didn't even have adequate oil temps yet." As soon as the pilot added takeoff power, the airport manager "knew something was wrong." The engine "began to pop," "stutter," and "sputter," and "continued to do so the entire length of the runway. The engine was "producing less than full power, about 1,700 to 1,800 rpm, like he had a fuel problem, water in the fuel, or a leaning problem," and the airplane was "not accelerating." The airport manager kept thinking to himself, "Abort, abort!" The airplane lifted off near the end of the 5,600-foot runway (1.5 percent uphill grade), flew in ground effect and barely cleared sagebrush and a barbed wire perimeter fence. The left wing dipped and the airplane disappeared below the mesa and into a valley. Shortly thereafter, a plume of smoke was observed.</p> <p>A flight student said he overheard the pilot tell the airport manager that "he had never flown in the mountains before." He watched the pilot start the engine, taxi to the end of runway 03, and perform "a short run up, only checking the magnetos." When the pilot applied full power, "I knew that the engine was not running right because of the roughness we heard. We were thinking that he would abort but he kept rolling down the runway.</p> <p>Another witness at the airport, an accident reconstructionist with the Colorado State Patrol, recalled the airport manager telling the pilot that "at this altitude, the 180 horsepower engine does not have as much power." The airport manager's wife "was concerned about how much rest [the pilot] had received, because he told her that he had "flown into Grand Junction approximately 11</p>					
FACTUAL REPORT - AVIATION					

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### Narrative (Continued)

p.m. on Friday," and that "he was planning to fly all the way to Georgia, and arrive there about 2 a.m. Sunday morning" (it was estimated the pilot got no more than 6 hours of sleep.) She said that during the takeoff roll, the airplane "was not accelerating as it should."

Tournament attendees at Delta Golf Course, adjacent to the accident site, said the engine was "sputtering" when the airplane struck the ground near the 4th hole, and it immediately exploded and erupted into flames.

### PERSONNEL INFORMATION

The 46-year old pilot held a private pilot certificate with airplane single-engine land and instrument ratings, dated March 7, 2000. His third class airman medical certificate, dated May 16, 2002, contained the restriction, "Must wear corrective lenses while operating an aircraft." When the pilot applied for medical certification, he estimated his flight time to be 427 hours, of which 9 hours were accumulated during the previous 6 months. His most recent flight review was dated March 26, 2002. A family relative said he had spoken with the pilot on the evening before the accident. He said the pilot had never flown into or out of high elevation airports, and was unsure of what to expect.

According to the FAA and a Scottsdale, Arizona, aviation insurance company, the pilot had been involved in a landing incident in Boise, Idaho, on May 23, 2002. He was ferrying a Beech B24R, N6604R. During the landing roll on runway 28L, the nose landing gear collapsed, damaging the propeller, lower nacelle, exhaust stack, and nose wheel fork. The investigation was still open at the time of this writing. The insurance company conducted its own investigation and provided a copy of excerpts from the pilot's logbook. Dated from March 7, 2000, to August 6, 2002, the logbook reflected the following flight hours:

Total time: 564.8  
Pilot-in-command: 443.7  
Solo: 445.3  
Airplane, single-engine: 544.0  
Airplane, multiengine: 15.9  
Actual instruments: 9.5  
Simulated instruments: 37.3  
Instruction received: 117.2  
Cross-country: 390.7  
Night: 56.2

### AIRCRAFT INFORMATION

N5119R (s/n MB-654), a model B19, was manufactured by the Beech (now Raytheon) Aircraft Corporation and given FAA certification on July 26, 1974. It was equipped with a Textron-Lycoming O-360-A4J engine (s/n L-19136-36A), rated at 180 horsepower, and a Sensenich 78EM85-0-60, 2-blade, all metal, fixed-pitch propeller (s/n13630K).

A briefcase, containing the aircraft maintenance records, was ejected from the airplane and undamaged by the postimpact fire. According to these records, the airplane underwent an annual inspection on August 22, 2002, at a tachometer time of 1,382:69. Total airframe hours was 8,983:69. At a total time of 5,845.0 hours, the engine was overhauled on December 19, 1984, then reinstalled in N5119R. At the time of the most recent annual inspection, the engine had accrued 787.79 hours since the overhaul.

Between the time of the annual inspection and the day of the accident, the airplane had made two flights, totaling 3.5 hours. The first flight was a test flight made by the airport manager right after the annual inspection, and the airplane's previous owner made the second flight. No anomalies

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**Narrative (Continued)**

were reported.

**METEOROLOGICAL INFORMATION**

The following ASOS (Automated Surface Observing System) weather observations were recorded Montrose, Colorado, Regional Airport (MTJ), and Walker Field (GJT), Grand Junction, Colorado, located 25 miles southeast and 39 miles west-northwest of Delta, respectively:

MTJ (0953): Wind, calm; visibility, (greater than) 10 statute miles; sky condition, clear; temperature, 15 degrees C. (59 degrees F.); dew point, 6 degrees C. (43 degrees F.); altimeter, 30.31.

GJT (0956): Wind, 130 degrees at 10 knots; visibility, (great than) 10 statute miles; sky condition, clear; temperature, 17 degrees C. (63 degrees F.); dew point, 8 degrees C. (46 degrees F.); altimeter, 30.25

**AERODROME INFORMATION**

Blake Field (1V9), located 3 miles north of Delta, is situated on a mesa at an elevation of 5,193 feet msl (mean sea level). It has one asphalt runway: 03-21/5,600 feet x 50 feet. According to the airport manager, runway 03 has a 1.5 percent uphill grade.

**WRECKAGE AND IMPACT INFORMATION**


The accident site was at a location of 38 degrees, 47.798' north latitude, and 108 degrees, 03.140' west longitude, and at an elevation of 4,765 feet. According to a hand-held GPS (Global Positioning System) receiver, the approach end of runway 03 is at 38 degrees, north latitude, and 108 degrees, 03.354' west longitude, and at an elevation of 4,887 feet. The departure end of the runway is at 38 degrees, 47.529' north latitude, and 108 degrees, 03.430' west longitude, and at an elevation of 4,888 feet.

Examination of the accident site revealed a crater and ground scar in the earth, the latter ending at the airplane's right wing tip. The crater sides sloped 45 degrees. The ground scar, when measured with the crater, indicated the right wing was about 60 degrees down. The nose and tail were aligned on magnetic headings of 111 and 150 degrees, respectively. Both wing fuel tanks were breached and empty. The fuel selector was positioned on the right tank. The flaps on the fixed gear airplane were retracted. Flight control continuity was established from the various control surfaces to the cockpit area. One propeller blade was about straight and relatively undamaged; the other blade was bent aft slightly. The Larago LEIT-1005-AF emergency locator transmitter (s/n 7864) was found armed and activated. It was turned off and the antenna cable disconnected. The ELT battery expiration date was September 2004.

Although the cockpit was gutted, two instruments were recovered, to wit: vertical speed indicator, 1,600 feet per minute, down; altimeter, 4,760 feet msl, set to 30.34 in. Hg.

**MEDICAL AND PATHOLOGICAL INFORMATION**

An autopsy was performed on the pilot at the Montrose Community Hospital, Montrose, Colorado. In addition, FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma, performed a toxicological screen on various specimens. According to CAMI's report (#200200274001), diazepam, a tranquilizer, was detected in the blood (0.079 ug/ml, ug/g), and nordiazepam, its metabolite was detected in the blood (0.079 ug/ml, ug/g), lung, and kidney (0.106 ug/ml, ug/g). According to a CAMI toxicologist, diazepam (the generic name is Valium) is a tranquilizer and may cause drowsiness. It is contraindicated for flying.

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TESTS AND RESEARCH


On September 17, 2002, the engine was disassembled and examined at the facilities of Beegles Aircraft Service, Inc. Greeley, Colorado. After accessory removal, power train continuity was established and good thumb compression was found on all four cylinders. The Facet HA-6 carburetor (s/n CH-8-980) was destroyed. The throttle valve was at the mid-travel position, but the mixture control was destroyed. The engine driven fuel pump was destroyed. Both Bendix S4LN series magnetos were destroyed. All spark plugs exhibited grayish combustion color. The top number 1 spark plug was slightly darker. All electrodes appeared new with proper gaps, and the ignition wiring was securely attached. The oil screen contained no metal or other contaminants. The vacuum pump was disassembled; no anomalies were noted. The Electrosystems MZ 4222R starter gear was found forward and meshed with the starter ring gear teeth.


ADDITIONAL INFORMATION

In addition to the Federal Aviation Administration, parties to the investigation included Raytheon (Beech) Aircraft Corporation and Textron-Lycoming Engines.

The wreckage was released to the owner's insurance company's adjuster on September 16, 2002.

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<b>Landing Facility/Approach Information</b>					
Airport Name Blake Field	Airport ID: 1V9	Airport Elevation 5181 Ft. MSL	Runway Used 03	Runway Length 5600	Runway Width 75
Runway Surface Type: Asphalt					
Runway Surface Condition: Dry					
Type Instrument Approach: Unknown					
VFR Approach/Landing: Unknown					
<b>Aircraft Information</b>					
Aircraft Manufacturer Beech		Model/Series B19		Serial Number MB-654	
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tricycle					
Homebuilt Aircraft? No	Number of Seats: 4	Certified Max Gross Wt.	2150 LBS	Number of Engines: 1	
Engine Type: Reciprocating	Engine Manufacturer: Lycoming	Model/Series: O-360-A4J	Rated Power: 180 HP		
<b>- Aircraft Inspection Information</b>					
Type of Last Inspection Annual	Date of Last Inspection 08/2002	Time Since Last Inspection 4 Hours	Airframe Total Time 8984 Hours		
<b>- Emergency Locator Transmitter (ELT) Information</b>					
ELT Installed? Yes	ELT Operated? Yes	ELT Aided in Locating Accident Site? No			
<b>Owner/Operator Information</b>					
Registered Aircraft Owner  Sid Hall Enterprises, Inc.		Street Address P.O. Box 3008			
		City Albany	State GA	Zip Code 31706	
Operator of Aircraft  Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As: Southern Aircraft Sales			Operator Designator Code:		
<b>- Type of U.S. Certificate(s) Held: None</b>					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Ferry					
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<b>First Pilot Information</b>																																																																																				
Name		City		State	Date of Birth																																																																															
On File		On File		On File	Age																																																																															
					46																																																																															
Sex: M	Seat Occupied: Left	Principal Profession: Business		Certificate Number: On File																																																																																
Certificate(s): Private																																																																																				
Airplane Rating(s): Single-engine Land																																																																																				
Rotorcraft/Glider/LTA: None																																																																																				
Instrument Rating(s): Airplane																																																																																				
Instructor Rating(s): None																																																																																				
Type Rating/Endorsement for Accident/Incident Aircraft?				Current Biennial Flight Review? 03/2002																																																																																
Medical Cert.: Class 3		Medical Cert. Status: Valid Medical--w/ waivers/lim.		Date of Last Medical Exam: 05/2002																																																																																
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>565</td> <td>100</td> <td>544</td> <td>16</td> <td>56</td> <td>10</td> <td>37</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>444</td> <td></td> <td>444</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	565	100	544	16	56	10	37				Pilot In Command(PIC)	444		444								Instructor											Last 90 Days											Last 30 Days											Last 24 Hours										
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Seatbelt Used? Yes		Shoulder Harness Used?		Toxicology Performed? Yes																																																																																
				Second Pilot? No																																																																																
<b>Flight Plan/Itinerary</b>																																																																																				
Type of Flight Plan Filed: None																																																																																				
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<b>Weather Information</b>																																																																																				
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<b>Weather Information</b>					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
MTJ	0953	MDT	5759 Ft. MSL	25 NM	140 Deg. Mag.
Sky/Lowest Cloud Condition: Clear				Ft. AGL	Condition of Light: Day
Lowest Ceiling: None			Ft. AGL	Visibility: 10 SM	Altimeter: 30.31 "Hg
Temperature: 15 °C	Dew Point: 6 °C	Wind Direction:		Density Altitude: 6602	Ft.
Wind Speed: Calm	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): Ft.	Visibility (RVV)	SM	Intensity of Precipitation:		
Restrictions to Visibility: None					
Type of Precipitation: None					


<b>Accident Information</b>					
Aircraft Damage: Destroyed		Aircraft Fire: Ground		Aircraft Explosion: None	
Classification: U.S. Registered/U.S. Soil					

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	1				1
Other Ground					
- GRAND TOTAL -	1				1

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Administrative Information		
<p>Investigator-In-Charge (IIC)</p> <p>Arnold W. Scott</p>		
<p>Additional Persons Participating in This Accident/Incident Investigation:</p> <p>Floyd J Landon Aviation Safety Inspector - Airworthiness FAA Flight Standards District Office 116 North 2400 West Salt Lake City, UT 84116</p>		
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